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Claims 9 and 12 are rejected, under, as being anticipated by Stine '096. The Applicant acknowledges and respectfully traverses the raised anticipatory rejection in view of the following remarks.

As the Examiner is aware, in order to properly support an anticipation rejection under 35 U.S.C. § 102(b), the cited reference must disclose each and every feature of the presently claimed invention. Stine et al. '096 discloses a torque control for a powertrain and change-gear transmission and arguably discusses such transmissions in relation to direct-drive ratio having direct torque transfer from input to output shafts without torque transfer across meshing gear teeth, or through counter shafts (see column 1, last paragraph).

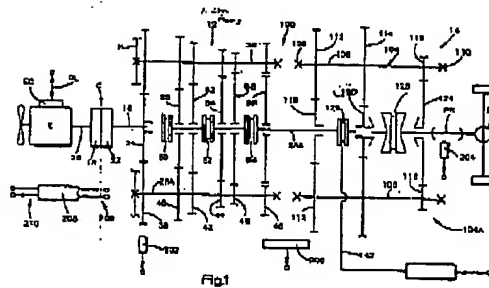
As will be shown below, Stine et al. '096 does not disclose, teach or even suggest such a direct torque transfer from input to output shafts *without* meshing or driving other gears or counter shafts. In fact, what Stine et al. '096 actually teaches is that such direct torque transfer, "... is not fully attractive for power trains having (i) overdrive-type transmissions, as a lesser engine torque would be available in the higher (i.e. overdrive) ratios than in a lower ratio (direct), which would be a disturbing drive characteristic ...".

Importantly, Stine et al. '096 does not disclose *solely*, or *only* direct transfer of power or torque from an input shaft to an output shaft as recited in Applicant's claims. As shown in Stine's FIG. 1, reproduced below, the input shaft 16 drives an input gear 24 which is in constant meshed contact with main countershaft gear(s) 38 on the counter shafts 26 and 26A. This constant meshing of gears occurs even where there is a direct connection between input shaft 16 and main transmission shaft 28A.

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Contrary to the disclosure in Stine et al. '096, the Applicant's claim 9 specifically recites, "... when the area group direct gear directly connects the area group input shaft (1') to the area group output shaft (2'), *only* the transmission input shaft (1), the transmission output shaft (2), the area group input shaft (1') and the area group output shaft (2'), rotate ...". According to FIG. 1 of Stine et al. '096, there cannot be, in any gear, a direct coupling of the input shaft 16, and the output shaft 28A without continued meshing of gears and rotation of the countershafts 26, 26A. Thus, not only do the input shaft 16, main shaft 28 and output shaft rotate in Stine et al. '096, but also each of the countershafts 26, 28 and 106 must continue to rotate along with the meshing gears 24, 38 and 120. Thus, at least the Applicant's claimed feature where *only* the input and output shafts of the transmission rotate, is not disclosed, taught or suggested in any manner by Stine et al. '096

Besides this, claim 9 further relates to the feature of the present invention where *only* the directly connected transmission input and output shafts are rotating, and, *only* the directly connected input and output shafts of the area group rotate along with only the respective coupling components. In other words, none of the ancillary transmission components not involved in the direct-drive power path rotate. Accordingly, claim 9 recites that besides the respective input and output shafts, *only* "... associated shift elements of the transmission direct gear and the area group direct gear, rotate so as to minimize friction losses within the transmission and the area group". Noting again in Stine et al. '096, FIG. 1 above, it is clearly

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seen that the in addition to the rotation of the transmission shafts, all of the shift elements, i.e., gears and countershafts also continue to rotate even where the direct-drive gear is engaged. These gears and counter shafts are obviously not transmitting any of the power flow, but merely spinning or rotating in place due to their constant connection with drive gear 24, for example.

To clarify this aspect of the Application, claim 15 is amended to recite, "... only the transmission input shaft (1), the transmission output shaft (2), the area group input shaft (1') and the area group output shaft (2'), along with ~~associated shift~~ power transferring elements of the transmission direct gear and the area group direct gear, rotate so as to minimize friction losses within the transmission and the area group". As is readily apparent, there are a significant number of rotating transmission elements in Stine et al. '096 which do not transfer any power flow anywhere, much less between the respective input and output shafts of the transmission. Furthermore, the Applicant has added new claim 16 which recites the feature "wherein a power flow path in the direct gear state through the transmission and area group consists essentially of the transmission input shaft (1) and the transmission output shaft (2), the area group input shaft (1') and the area group output shaft (2') to minimize friction losses within the transmission and the area group". Thus, the Applicant believes that these features of each of the independent claims 9, 15 and 16 are not disclosed, taught or suggested in any manner and therefore, the Applicant respectfully requests withdrawal of the anticipation rejection.

Claims 1-11 and 13-15 are rejected, under 35 U.S.C. § 103(a), as being unpatentable over Frost '959 in view of Anthony (Reynoldson) '322. The Applicant acknowledges and respectfully traverses the raised obviousness rejection in view of the following remarks.

Even if the combination of Reynoldson '322 and Frost '959 is proper, and the Applicant does not agree that a relatively simple gearbox such as disclosed in Reynoldson '322 would

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be possible to combine with the three-speed transfer case for a 4 wheel drive vehicle to achieve a conventionally functional drivetrain, such a combination still fails to disclose, teach or suggest all the features of the presently claimed invention.

Arguably, there is a direct-drive condition in Frost '959 where clutch pack 96 is engaged to couple clutch carrier assembly 62 to ring gear 68 and thus connect the input shaft 24 to output shaft 26. However, because of the meshed gear pair 70, 72 supported by the input shaft 24 and rear carrier ring 76, the meshed gear pair 70, 72 still rotates, and hence the first and second sun gears 64, 66 continue to rotate as well. For this reason clutches 84 and 86 are disengaged so that no power flow is transferred through these clutches. Thus, in the case of a direct-drive of Frost's transfer case, ancillary gears, e.g. meshed gears 70, 72 as well as transmission elements besides the input and output shafts of the planetary gear set in the transfer case continue to rotate. In other words, even if one could combine Frost '959 with the transmission of Reynolds '322, the combination still fails to disclose the feature of the present invention wherein, ". . . only the transmission input shaft (1), the transmission output shaft (2), the area group input shaft (1') and the area group output shaft (2'), along with associated shift elements of the transmission direct gear and the area group direct gear, rotate . . ." as recited in Applicant's claim 9. This is primarily because, in Frost '959 the sun gears 64 and 66 will still continue to cause rotation of the shift elements of the clutches 84 and 86, but no power path is created, nor power transmitted by these shift elements, even in the direct-drive ratio.

Therefore, even where these references are combined, the combination still fails to disclose, teach or suggest each of the features of the presently claimed invention as required by case law. And, as stated in *Connell v. Sears, Roebuck and Co.*, 722 F.2d 1542, 1549, 220 USPQ 193, 199 (Fed. Cir. 1983) in order to support an allegation of obviousness of the claimed invention:

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The test is whether the claimed invention as a whole in light of all the teachings of the references in their entireties, would have been obvious to one of ordinary skill in the art at the time the invention was made.

Thus, the Applicant submits that the whole of the Applicant's presently claimed invention is not obvious in light of the prior art references either alone, or in combination. Specifically, because the Frost '959 reference includes ancillary transmission elements which continue rotating, the references cannot render obvious the Applicant's recited feature wherein ". . . *only* the transmission input shaft (1), the transmission output shaft (2), the area group input shaft (1') and the area group output shaft (2'), along with associated shift elements of the transmission direct gear and the area group direct gear, rotate so as to minimize friction losses within the transmission and the area group" as for example recited in claim 9.

Similarly in claim 15 the combination fails to render obvious the claimed feature that only the respective input and output shafts ". . . along with *only* power transferring elements of the transmission direct gear and the area group direct gear, rotate so as to minimize friction losses within the transmission and the area group". As these amendments made to claim 15 are believed to mainly editorial and clarifying in nature relative to the cited references, such amendments are not believed to rise to a level which would require further search or consideration. Therefore the Applicant respectfully believes that this case is now in condition for allowance in view of the above remarks and amendments.

In view of the above, the Applicant respectfully requests withdrawal of the obviousness rejection of the presently claimed invention. If any further amendment to this application is believed necessary to advance prosecution and place this case in allowable form, the Examiner is courteously solicited to contact the undersigned representative of the Applicant to discuss the same.

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In view of the above amendments and remarks, it is respectfully submitted that all of the raised anticipation and obviousness rejections should be withdrawn at this time. If the Examiner disagrees with the Applicant's view concerning the withdrawal of the outstanding rejections or applicability of the Stine '096, Frost '959 and Anthony (Reynoldson) '322 references, the Applicant respectfully requests the Examiner to indicate the specific passage or passages, or the drawing or drawings, which contain the necessary teaching, suggestion and/or disclosure required by case law. As such teaching, suggestion and/or disclosure is not present in the applied references, the raised rejection should be withdrawn at this time. Alternatively, if the Examiner is relying on his/her expertise in this field, the Applicant respectfully requests the Examiner to enter an affidavit substantiating the Examiner's position so that suitable contradictory evidence can be entered in this case by the Applicant.

In view of the foregoing, it is respectfully submitted that the raised rejections should be withdrawn and this application is now placed in a condition for allowance. Action to that end, in the form of an early Notice of Allowance, is courteously solicited by the Applicant at this time.

The Applicant respectfully requests that any outstanding objection(s) or requirement(s), as to the form of this application, be held in abeyance until allowable subject matter is indicated for this case.

In the event that there are any fee deficiencies or additional fees are payable, please charge the same or credit any overpayment to our Deposit Account (Account No. 04-0213).

Respectfully submitted,



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